

# ISR & SSM News

## Twice the same input at the ISR

Danielle and Tracey Steenkamp are biokineticists at UP's Institute for Sport Research (ISR) and work with special population clients suffering from chronic diseases such as Diabetes, Parkinsons, Pulmonary diseases, Multiple sclerosis, and stroke patients. They also specialize in working with those suffering from cardiac conditions (including heart attacks, bypass surgery, pacemakers, etc) and those who are at risk for developing cardiovascular diseases (High Blood Pressure, Dyslipidemia, and Obesity).

Danielle and Tracey are identical twins. They grew up in Pretoria and from the age of 12 have been coming to Tukkies. They were actively involved in gymnastics at Tuks and competed in the South African championships for 10 years. Today they still enjoy living a healthy active lifestyle and count exercising as their favourite hobby. They did equally well at school. "Even our final averages for first, second and third year combined for our UP degree differed by only 0.3%, and we did equally well in the same subjects." Danielle and Tracey enrolled for Human Movement Sciences in 1999 and both completed their Honours degree in Biokinetics in 2003. They did a one-year internship at the CSIR, and started working at UP within six months of each other in 2005. They plan to enrol for their respective master's degrees next year.

There are various clinics (Cardiac, hydrotherapy, arthritic clinic) at the ISR practice which is situated at the University of Pretoria Sports Centre. Tracey and Danielle co-ordinate the Cardiac/Diabetes clinic and Hydrotherapy clinic and work mostly with medium to high risk clients.

"We spend a lot of our time in the rehabilitation gymnasium and our passion is helping people improve their quality of life," say the twins. "Many of our patients are in the plus 50 age group, the majority being in their 70's. The oldest gym member is 90 years old, so hence you are never too old to exercise."

"We evaluate each patient and work out an individual exercise plan. We monitor their blood pressure and heart rate and supervise their exercise technique. Socially it is a very nice environment to work in, as there are always times for a chat and a joke while exercising." They say it is very satisfactory working with the older patients and that they love their work.



## Dr Christa "bags" another Degree!

Dr Christa Janse van Rensburg - Head of the Section Sports Medicine at the University of Pretoria - obtained her MD (Doctor in Medicine) on 7 September 2012.

Title of her Script/thesis **"The effect of exercise and training on the autonomic function, disease activity and functional capacity in females suffering from Rheumatoid Arthritis (RA)"**

RA is a chronic disease and one of the more common auto-immune diseases. It generally occurs more amongst females than males. Patients with RA rely almost solely on pharmaceutical intervention to manage the disease.

This study firstly compared the autonomic function of RA females to that of healthy females, whereupon the emphasis shifted to the effect of exercise intervention aspects on the following three aspects relating to the effects of RA:

- Autonomic function (as measured by heart rate variability)
- Disease activity (as measured by Disease Activity Score, Visual Scale and Health Activity Questionnaire)
- After a 3 month period it was found that exposing Rheumatoid Arthritis patients to exercise had a meaningful effect on their autonomic function, disease activity and functional capacity.

